

## 5 ABSTRACT

The power voltage supply for a power amplifier is switched between an operational full power mode and a reduced power mode by the switching of a dual state impedance device connected in series between the power amplifier and the power supply. A control circuit detects the level of a signal to be amplified by that amplifier and switches the impedance states thus reducing the power output capability of the power amplifier and placing the power amplifier into a reduced power mode. In one embodiment, the signal is produced by spectrally filtering with a low pass filter, with the cross-over frequency being adjustable. Additionally, the gain of the amplifier can be reduced for high level signals.

[illegible]